(19) World Intellectual Property Organization International Bureau



- 1486 A COLOR CORRESCO DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE

(43) International Publication Date 15 March 2001 (15.03.2001)

PCT

(10) International Publication Number WO 01/18691 A3

(51) International Patent Classification⁷: 9/54, 9/46

VE 0/44.

(21) International Application Number: PCT/US00/24492

(22) International Filing Date:

7 September 2000 (07.09.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

09/391.068

7 September 1999 (07.09.1999) US

- (71) Applicant: CITRIX SYSTEMS, INC. [US/US]: 6400 NW 6th Way, Fort Lauderdale, FL 33309 (US).
- (72) Inventors: MITCHELL, David, C.; 183 S 250 E. Orem. UT 84058 (US). WALTERS, Ben: 2080 E Evergreen Avenue, Salt Lake City. UT 84109 (US). MITCHELL, Dale: 1150 N Regent Court, Orem, UT 84057 (US).

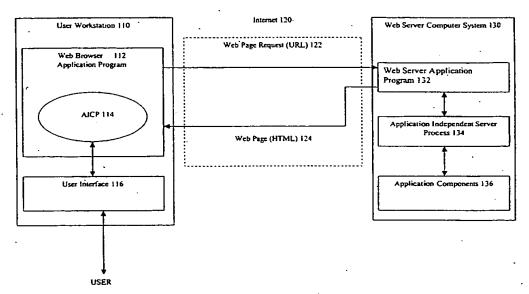
- G06F 9/44. (74) Agent: MIRANDA, David, G.: Testa. Hurwitz & Thibeault. LLP. High Street Tower. 125 High Street. Boston. MA 02110 (US).
 - (81) Designated States (national): AE. AG. AL. AM. AT. AU. AZ. BA. BB. BG. BR. BY. BZ. CA. CH. CN. CR. CU. CZ. DE. DK. DM. DZ. EE. ES. FI. GB. GD. GE. GH. GM. HR. HU. ID. IL. IN. IS. JP. KE. KG. KP. KR. KZ. LC. LK. LR. LS. LT. LU. LV. MA. MD. MG. MK. MN. MW. MX. MZ. NO. NZ. PL. PT. RO. RU. SD. SE, SG. SI. SK. SL. TJ. TM. TR. TT. TZ. UA. UG. UZ. VN. YU. ZA. ZW.
 - (84) Designated States (regional): ARIPO patent (GH. GM. KE. LS. MW. MZ. SD. SL. SZ, TZ. UG, ZW), Eurasian patent (AM. AZ, BY, KG. KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- (88) Date of publication of the international search report: 10 January 2002

[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR EFFICIENTLY TRANSMITTING INTERACTIVE APPLICATION DATA BETWEEN A CLIENT AND SERVER USING MARKUP LANGUAGE



(57) Abstract: A method for efficiently transferring data between a client and a server includes the steps of: providing an application program; providing an application-independent client process effecting a plurality of client states; providing an application-independent server process effecting a plurality of server states; transferring data from the server process to the client process in response to an application program; and updating at least one client state in response to the transferred data. A related apparatus is also disclosed.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Internal al Application No PCT/US 00/24492

A. CLASSIF IPC 7	G06F9/44 G06F9/54 G06F9/	4 6	
According to	International Patent Classification (IPC) or to both national class	sification and IPC	•
B. FIELDS S	SEARCHED		
	cumentation searched (classification system followed by classific G06F	cation symbols)	
Documentati	ion searched other than minimum documentation to the extent th	at such documents are included in the fields s	earched
According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols)			
C. DOCUME	NTS CONSIDERED TO BE RELEVANT		· · · · · · · · · · · · · · · · · · ·
Calegory *	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.
	(IL); ZANGVIL AVNER (IL); MÉNTA		12-14, 18,19, 23,24, 27,31, 32,35 5,9,16, 20,25, 28,33,
,	page 5, line 1 -page 3, line 30 page 8, line 5 - line 26		35,30
		-/	
		-	
X Furti	her documents are listed in the continuation of box C.	Patent family members are tisted	I in annex.
"A" docume consic "E" earlier of fiting c "L" docume which citatio "O" docume other other "P" docume	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another n or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filling date but	or priority date and not in conflict will cited to understand the principle or the invention. "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the description of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvice in the art.	n the application but neory underlying the claimed invention of the considered to cournent is taken alone claimed invention need invention need the such docupous to a person skilled
3	0 May 2001	07/06/2001	
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl.	Authorized officer	
	Fax: (+31-70) 340-3016	Archontopoulos, [<u>-</u>

INTERNATIONAL SEARCH REPORT

PCT/US 00/24492

100011-	DOCUMENTO CONTROL DE LA CONTRO	PCT/US 0	0/24492
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
(\	US 5 537 548 A (FIN TONG-HAING ET AL) 16 July 1996 (1996-07-16)		1-3,7,8, 12-14, 18,19, 23,24, 27,31, 32,35 5,9,16, 20,25,
	abstract column 2, line 11 - line 36 column 3, line 9 -column 5, line 33		28,33, 35,36
	EP 0 475 581 A (HEWLETT PACKARD CO) 18 March 1992 (1992-03-18)		1-3,7,8, 12-14, 18,19, 23,24, 27,31,
	abstract column 2, line 20 - line 45 column 3, line 41 - line 51		32,35 5,9,16, 20,25, 28,33, 35,36
	column 4, line 23 -column 5, line 32 column 6, line 2 -column 7, line 8 EP 0 878 759 A (IBM) 18 November 1998 (1998-11-18)		1-3,7,8, 12-14, 18,19, 23,24,
			27,31, 32,35 5,9,16, 20,25, 28,33, 35,36
	abstract column 1, line 2 - line 6 column 2, line 35 -column 4, line 30 column 9, line 54 -column 10, line 15 column 10, line 42 -column 11, line 50		33,30

INTERNATIONAL SEARCH REPORT

Insurmation on patent family members

Interna. al Application No PCT/US 00/24492

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9728623	A	07-08-1997	IL AU	116804 A 1397097 A	06-12-1998 22-08-1997
US 5537548	Α	16-07-1996	JP CA EP	5046568 A 2071451 A,C 0527590 A	26-02-1993 09-02-1993 17-02-1993
EP 0475581	Α	18-03-1992	JP US	4281516 A 5408600 A	07-10-1992 18-04-1995
EP 0878759	Α	18-11-1998	JP,	10301874 A	13-11-1998

THIS PAGE BLANK (USPTO)